



# MIAMI-SOUTH FLORIDA

## National Weather Service Forecast Office

<http://www.weather.gov/miami>

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## SOUTH FLORIDA WINTER 2013-2014 RECAP

### One of the Warmest on Record

For the third straight winter, warmer than normal temperatures were observed across south Florida. This was in sharp contrast to most of the eastern and central United States which had one of the coldest winters in recent memory. During the meteorologically-defined winter season of December 2013 through February 2014, average temperatures across south Florida were anywhere from two to as much as four degrees above normal and ranked among the warmest winters on record at the four main climate sites (see table below). A stronger-than-normal winter high pressure area in the middle-levels of the troposphere (Figure 1) extending from the western North Atlantic to Florida was the main reason behind the mild winter across south Florida. The persistent nature of this high pressure led to east and southeast winds from the warm Atlantic waters to blow across south Florida and blocking the southward movement of any arctic or polar air masses. This was significant in light of the sharply colder winter across most of the eastern and central United States.

### Temperatures

Here are average December 2013-February 2014 temperatures and departures from normal in degrees F and ranking for select locations:

Location (beginning of period of historical record)	Dec 2013-Feb 2014 Avg Temp	Departure From Normal (F)	Winter Rank
Miami (1895)	72.3	+2.7	3 <sup>rd</sup> warmest
Fort Lauderdale (1912)	71.4	+1.1	10 <sup>th</sup> warmest
West Palm Beach (1888)	70.7	+3.5	9 <sup>th</sup> warmest
Naples (1942)	68.9	+2.8	9 <sup>th</sup> warmest

Cold weather impacts this winter were minimal compared to the past few winters. Less than a handful of mornings had temperatures near or right at freezing in the typically colder areas west and south of Lake Okeechobee, confined to a period in mid-late January. Each of the four main sites above recorded less-than-the-average number of sub-50 degree days, while at the same time recording well above the average number of 80+ degree high temperature days.

Overall, the 2013-2014 winter season temperatures ranks very close to, if not slightly warmer than, the previous winter of 2012-2013.

Below are other noteworthy individual statistics for the four main climate sites:

- **Miami International Airport:** Both December and February were in the top 5 warmest on record (December 2<sup>nd</sup> warmest and February 5<sup>th</sup> warmest). The lowest winter temperature recorded was 46 degrees on January 17<sup>th</sup> and 19<sup>th</sup>. The highest temperature was 86 degrees set on four different dates: December 15<sup>th</sup> and 24<sup>th</sup> and February 25<sup>th</sup> and 26<sup>th</sup>. A total of four days below 50 degrees were observed, along with 56 days of 80 degrees or greater.

- **Palm Beach International Airport:** Both December and February were in the top 10 warmest on record (December tied the warmest on record and February was the 6<sup>th</sup> warmest). The lowest winter temperature recorded was 38 degrees on January 23<sup>rd</sup>. The highest temperature recorded was 86 degrees on January 2<sup>nd</sup>, February 24<sup>th</sup> and 26<sup>th</sup>. A total of 10 days below 50 degrees were observed, along with 50 days of 80 degrees or greater.

- **Fort Lauderdale/Hollywood International Airport:** Both December and February were in the top 5 warmest on record (December and February 4<sup>th</sup> warmest on record). The lowest winter temperature recorded was 43 degrees on January 17<sup>th</sup> and 19<sup>th</sup>. The highest temperature was 88 degrees on February 26<sup>th</sup>. A total of six days below 50 degrees were observed, along with 46 days of 80 degrees or greater.

- **Naples Municipal Airport:** Both December and February were in the top 10 warmest on record (December 3<sup>rd</sup> warmest on record and February 9<sup>th</sup> warmest). The lowest winter temperature recorded was 38 degrees on January 19<sup>th</sup> and 23<sup>rd</sup>. The highest temperature was 87 degrees on February 4<sup>th</sup>. A total of 14 days below 50 degrees were observed, along with 46 days of 80 degrees or greater.

## Precipitation

Winter 2013-2014 precipitation was somewhat unusual in that there was large variability in rainfall amounts in what is typically a season of rather uniform precipitation across south Florida. In general, rainfall was above normal over the eastern metro areas and near to below normal over interior and western areas. One reason for the wetter conditions to the east was the presence of a few stalled fronts and resultant east winds off the Atlantic which concentrated rainfall over the eastern part of the area. These same east winds dry out while crossing the peninsula, leading to less rainfall away from the east coast. A couple of high to extreme rainfall events took place; one on January 9/10 when 15 to 22 inches of rain fell over portions of Palm Beach County and another on December 26<sup>th</sup> with two to five inches in a 12-hour period over much of Miami-Dade County.

The driest part of south Florida was over the southern Everglades and coastal Collier County where only three to four inches of rain was measured during the 90-day winter period.

Following are December 2013-February 2014 rainfall totals, departure from normal in inches and ranking for selected locations:

<b>Location (Beginning of Period of Record)</b>	<b>Dec 2013-Feb 2014 Rainfall (inches)</b>	<b>Departure from Normal</b>	<b>Rank</b>
Big Cypress	<b>7.72</b>		
Brighton Reservation (Glades Co.)	<b>3.37</b>		
Cape Florida	<b>7.23</b>		
Fort Lauderdale/Hollywood Int'l (1912)	<b>6.71</b>	<b>-2.34</b>	
Fort Lauderdale Dixie Water Plant	<b>7.68</b>		
Fort Lauderdale Beach	<b>6.53</b>		
Hialeah (1940)	<b>11.97</b>		<b>4<sup>th</sup> wettest</b>
Hollywood (1963)	<b>7.69</b>	<b>-1.36</b>	
Homestead General Airport (1990)	<b>7.70</b>		
Immokalee	<b>5.20</b>		
Juno Beach	<b>20.88</b>		

LaBelle (1929)	<b>4.86</b>	<b>-1.29</b>	
Marco Island	<b>4.76</b>		
Miami Beach (1928)	<b>9.71</b>	<b>+3.32</b>	<b>8<sup>th</sup> wettest</b>
Miami International Airport (1911)	<b>7.74</b>	<b>+1.83</b>	<b>26<sup>th</sup> wettest</b>
Moore Haven (1918)	<b>4.45</b>	<b>-1.09</b>	
Muse	<b>6.47</b>		
North Miami Beach	<b>10.84</b>		
Naples East/Golden Gate	<b>5.36</b>		
Naples Municipal Airport (1942)	<b>3.48</b>	<b>-1.92</b>	<b>28<sup>th</sup> driest</b>
NWS Miami	<b>8.02</b>		
Oasis Ranger Station	<b>3.75</b>		
Opa-Locka Airport	<b>11.87</b>		
Ortona (1940)	<b>5.00</b>		
Palm Beach Gardens	<b>12.97</b>		
Palm Beach International Airport (1888)	<b>15.82</b>	<b>+6.49</b>	<b>7<sup>th</sup> wettest</b>
Pembroke Pines – North Perry Airport	<b>7.94</b>		
Pompano Beach Airpark	<b>5.06</b>		
Tamiami Airport – West Kendall	<b>7.70</b>		
The Redland (1942)	<b>10.76</b>	<b>+4.64</b>	<b>6<sup>th</sup> wettest</b>
South Bay (15S)	<b>4.58</b>		

## Outlook for March-May

[The outlook by the NOAA Climate Prediction Center](#) calls for a likelihood of the warm pattern continuing through May (Figure 3), although the first half of March will likely see some temperature swings from cool to warm. The precipitation outlook is for equal chances of near, above or below normal through May.

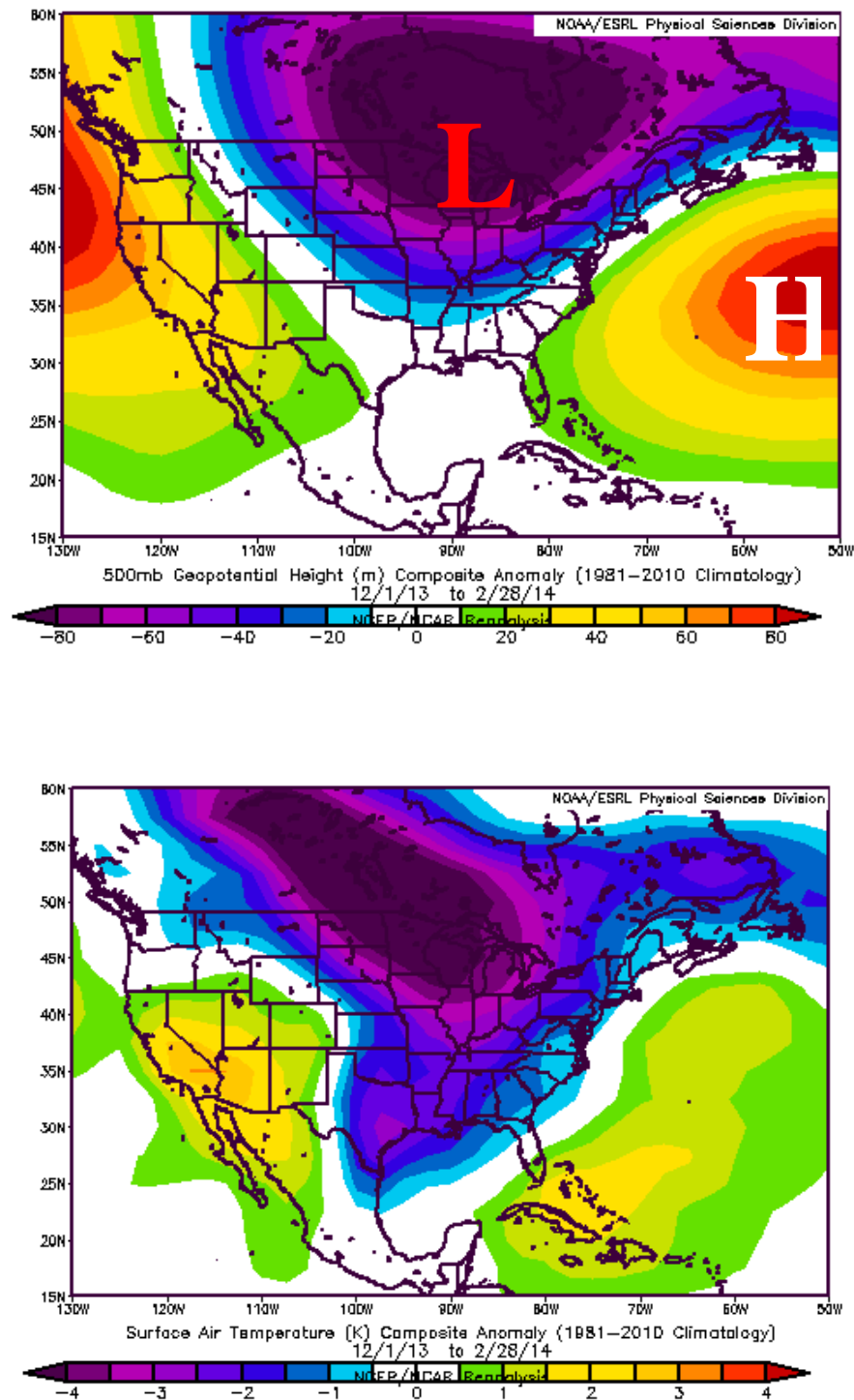
The increasing spring temperatures mean that the ground can dry quite rapidly and lead to an increased threat of wildfires during the months of March, April and May. All persons are urged to take measures to reduce the chance of wildfires. Visit the [Florida Forest Service web site](#) for more information on how to help prevent wildfires.

March, April and May are also the time of year when moderate to fresh east winds are common, significantly increasing the risk of rip currents along the east coast beaches. A sharp increase in drowning deaths and rescues caused by rip currents occurs during the spring months due in part to stronger east winds and more beachgoers. All residents and visitors visiting area beaches are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. [Visit the National Weather Service Rip Current Awareness page](#) for more information.

Lastly, the frequency of thunderstorms begins to increase in the spring months which can sometimes be accompanied by strong winds, hail and even tornadoes.

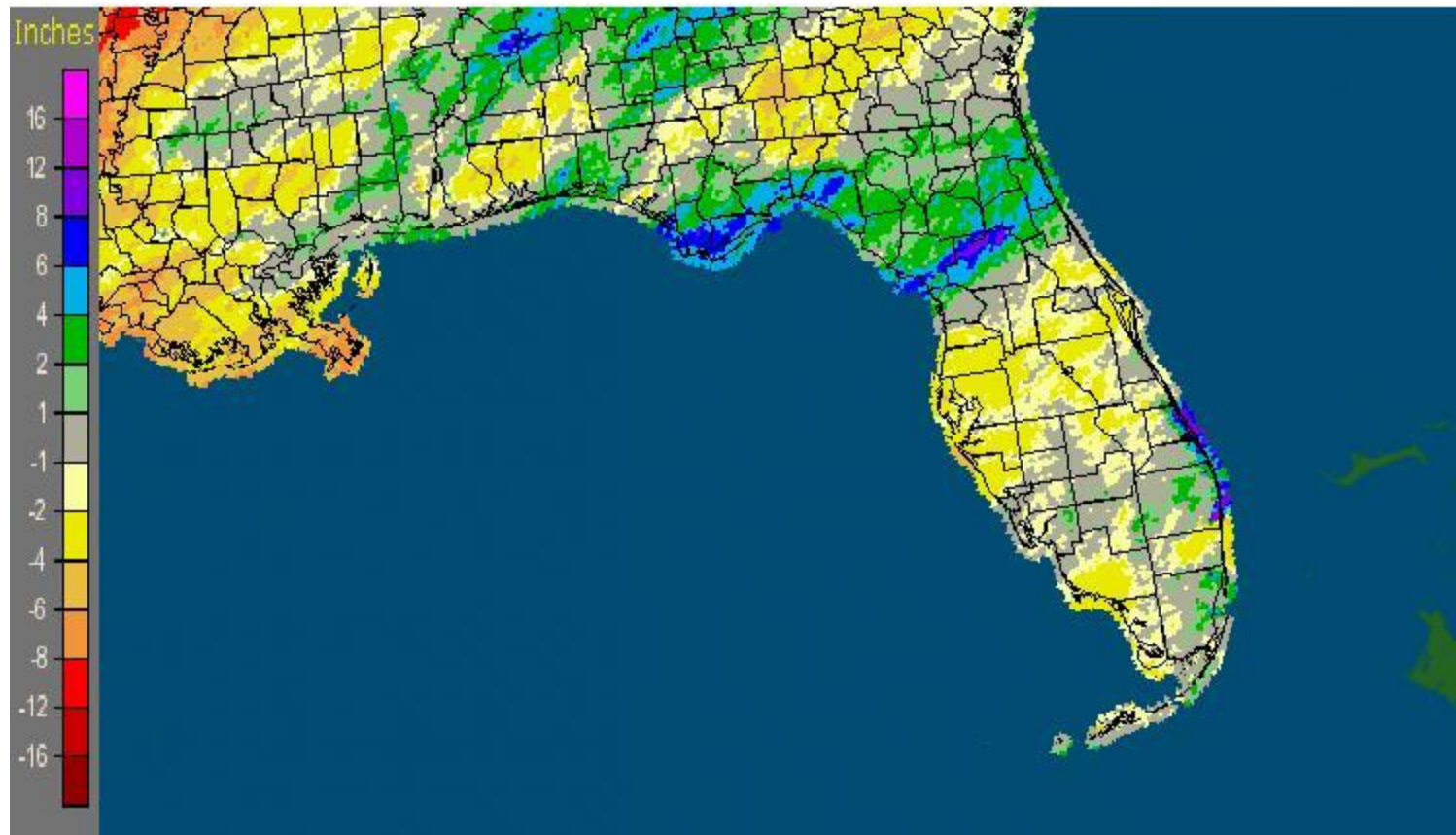
For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at [weather.gov/southflorida](http://weather.gov/southflorida).

*(Figures included in next three pages)*



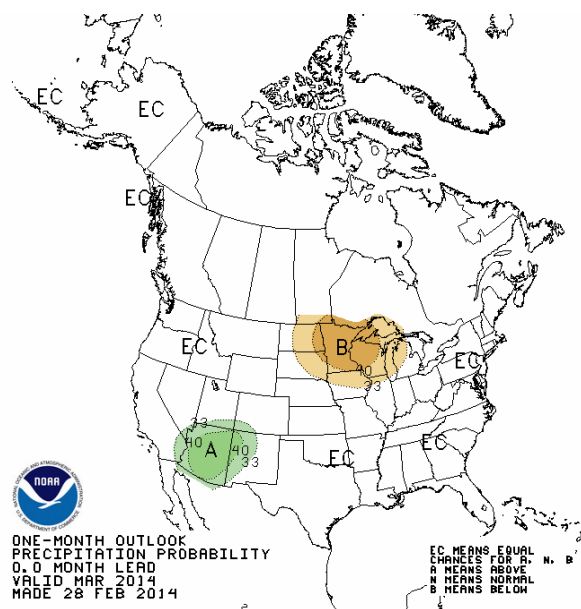
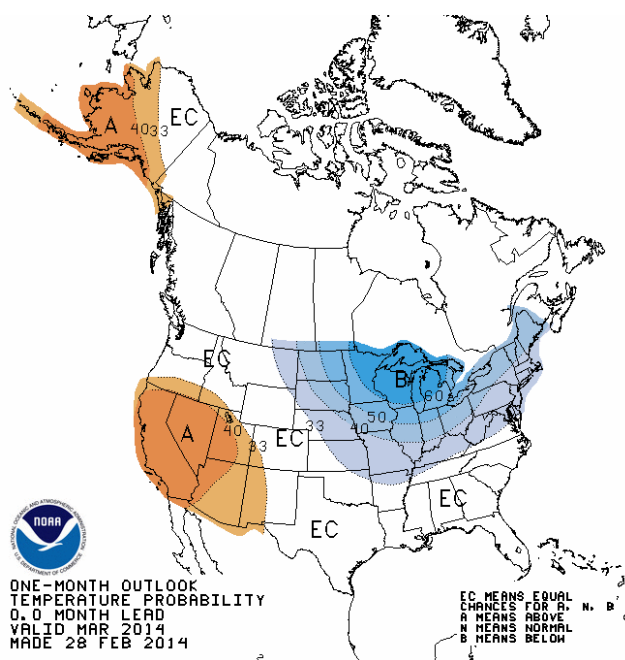
**Figure 1:** 500 mb (middle-tropospheric) height anomalies for period December 2013 to February 2014 (top) and surface temperature departure from normal (bottom). Stronger-than-normal high pressure (H) prevailed from the western North Atlantic all the way to Florida, which was the main reason for the mild winter. Strong low pressure aloft (L) over the Great Lakes was the reason behind the cold winter in much of the eastern and central U.S.

Florida: Current 90-Day Departure from Normal Precipitation  
Valid at 3/2/2014 1200 UTC- Created 3/2/14 20:20 UTC

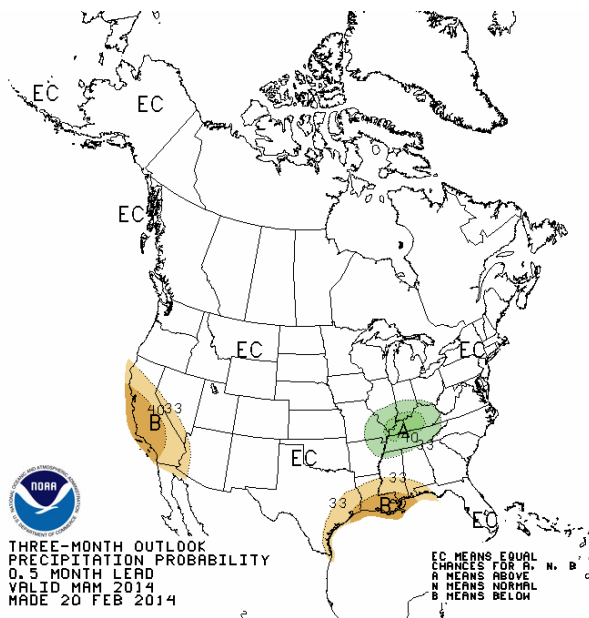
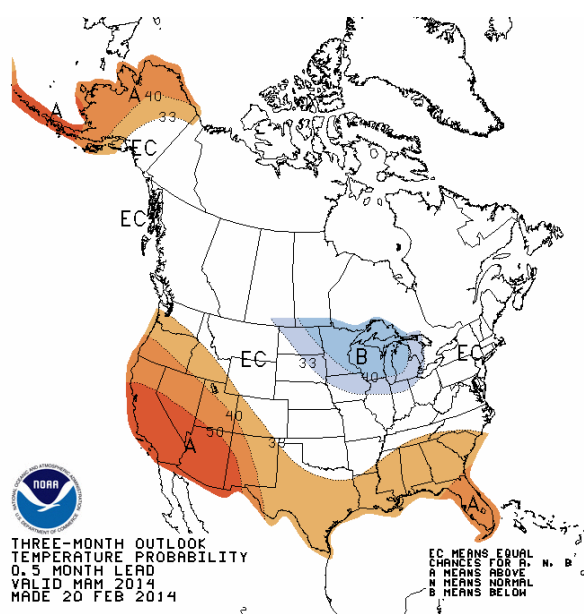


**Figure 2:** Rainfall departure from normal in inches from Dec 2013 through Feb 2014.

## March 2014



## March – May 2014



**Figure 3:** NOAA Climate Prediction Center outlook for March-May.